Second cancers in patients with head and neck carcinoma: Prognostic factors

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Background. The occurrence of a second tumor in patients with squamous cell carcinoma of the head and neck (HNCA) exceeds that expected in the general population. The purpose of this study was to determine the predictive factors associated with the development of a second cancer in these patients.
Methods. We identified 381 patients with HNCA treated between 1992 and 2011 at the University Hospital of Salamanca. Of these, 36 developed a second tumor. We included demographic, clinical and tumor characteristics and examined their relationship to the diagnosis of a second tumor. For this we conducted a univariate and multivariate analysis. We used the method of Cox proportional hazards (Forward stepwise) multivariate analysis. A p value less than or equal to 0.05 was considered statistically significant. The analysis was performed using SPSS 12.0.
Results. Approximately 11% (36/321) of patients developed a second cancer during follow-up. 69.4% (25/35) of second tumors involving the supradiaphragmatic aerodigestive tract and lungs. 51.4% (18/35) was squamous cell histology. The median follow-up of patients with a second tumor was 23.93 months (interquartile range = 49). 80% (24/30) developed a new malignancy after 12 months. Both univariate and multivariate analysis, the variable that was significantly associated with the occurrence of second malignancies was duration of neoadjuvant chemotherapy. In multivariate analysis, we found that the variables age (HR = 1.490, $p = 0.14$) and duration of neoadjuvant chemotherapy (HR = 1.655, $p = 0.001$) were associated with the development of a second malignancy.
Conclusions. The results suggest that patients with HNCA have an increased risk of a second tumor mainly upper aerodigestive tract and lung. Multivariate analysis confirmed a model of two risk factors for the development of the second tumor: age (HR = 1.490, $p = 0.014$) and the duration of neoadjuvant chemotherapy (HR = 1.655, $p = .001$).

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Sialometry in irradiated head and neck cancer patients

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Objetive. Determination of variation of parotid gland salivary excretion with a sialometry in patients with head and neck cancer after oncologic treatment radiotherapy with or without chemotherapy.
Material and methods. Between October 2010 and September 2012, 28 patients (2 females and 26 males) diagnosed with head and neck cancer underwent sialometries (basal and chewing stimulated) before beginning their treatment, after one month and after six months of it. Saliva production was quantified weighting a gauze with a high precision scale (scale RADWAG, AS 220/C/2 model). Spearman and Wilcoxon test were performed for statistical analysis of paired data. 8 patients had only radiotherapy treatment and 20 underwent both, chemo and radiotherapy.
Results. Average radiotherapy dose to the right parotid was 32.36 (21.25 Gy) and to the left parotid was 36.78 (17.06 Gy). Mean basal and stimulated sialometries (in grams) were 1.501 and 2.829 respectively; one month later records were 0.949 and 1.405 respectively. Six months later basal was 0.822 and stimulated 1.832. A statistically significant difference between pretreatment and 1-month basal sialometries as well as pretreatment and 6 months basal sialometries were evident. Significance was also reached when stimulated sialometries were compared.
Conclusion. In all the patients with one or both parotid glands irradiated the sialometry showed a decrease of saliva production.

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